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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,872	12/22/2000	Teruo Tajima	PM 276457 T4HW-00S0948	5705
7590 12/16/2004 PILLSBURY, WINTHROP LLP 1600 TYSONS BOULEVARD MCLEAN, VA 22102			EXAMINER SEFCHECK, GREGORY B	
			ART UNIT 2662	PAPER NUMBER

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/741,872	Applicant(s) TAJIMA, TERUO	
	Examiner Gregory B Sefcheck	Art Unit 2662	<i>ae</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/19/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 7/29/2004 is acknowledged.
- Claims 1, 2, 7-10, 13, and 14 have been amended. The previous rejection to claims 7-12 under 35 USC 112, 2nd paragraph is withdrawn due to the amendment of claim 7.
- Claim 19 has been added.
- Claims 1-19 are pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6, 7, 12, 13, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi (US006272114B1).

- In regards to Claims 1, 6, 7, 12, 13, and 18,

Kobayashi discloses a control apparatus and method for controlling other apparatuses in an audio and video communications system (Title; Abstract; Col. 1, line 64).

Referring to Fig. 4, Kobayashi shows that Node A has two IEEE 1394 bus ports to which Nodes B-D are connected (Col. 1, lines 40-50). Node A ports are allocated hierarchical node IDs and physical addresses are assigned through communication with Nodes B-D, thereby designating parent-child relationships between the nodes so that control is done in priority order (Col. 6-7, lines 20-7; claim 1,7,13, – AV controller/apparatus/method/system for controlling apparatuses and having a plurality of connection terminals to which the apparatuses can be selectively connected wherein predetermined identifiers are allocated to the connection terminals for designating a specific one of the apparatuses so that the apparatuses are controlled in priority order; claim 6,12,18 – connection terminals are serial bus terminals that comply with IEEE 1394 standards).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 8, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi in view of Ogino et al. (US006038625A), hereafter Ogino.

- In regards to Claims 2, 8, 14, and 19,

Kobayashi discloses an apparatus and method for controlling other apparatuses in an audio/video communications system that covers all limitations of the parent claims and limitations of claim 19 similar to those covered in claims 1, 7, and 13.

Kobayashi does not explicitly utilize characters or a symbol indicating a model number or type of apparatus as the identifier for each connection port.

Ogino discloses an apparatus, method and system for controlling audio/video apparatuses (Abstract). Referring to Fig. 1c, Ogino shows that set-top box 12 may be connected to a plurality of other apparatuses 14-24 over ports of an IEEE 1394 bus (Col. 6, lines 13-40). Ogino shows that, while the physical IDs assigned to the devices 14-24 may change when other devices are added and/or removed, a service registry may be used to register the GUID of each device, containing vendor identification and its connection point information (port allocation; Col. 2-3, lines 66-30; Col. 19-20, lines 63-8; claim 2,8,14 – each identifier is characters or a symbol that indicates a model number or type of apparatus; claim 2,8,14 – any apparatus designated by the identifier is controlled prior to any other apparatuses; claim 19 – control circuit assigns a device type indicator).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the identifiers allocated to control apparatus of Kobayashi by including the GUID of the connected device, as taught by Ogino. This modification would provide a persistent identifier for each apparatus in the system which could be associated with the bus ID of each apparatus, which may change as apparatuses are added/removed to the system.

5. Claims 3-5, 9-11, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi v. Ogino as applied to claims 2, 8, and 14 above, and further in view of Johas Teener (US006636914B1), hereafter Teener.

- In regards to Claims 3-5, 9-11, and 15-17,

Kobayashi v. Ogino discloses an apparatus, method and system for controlling audio/video apparatuses that covers all limitations of the parent claim.

Neither Kobayashi nor Ogino discloses how bus arbitration is performed between at least two apparatuses connected to the same connection terminal when one of the apparatuses is designated by the port identifier or when both apparatuses are designated by the port identifier but only one is directly connected.

Teener discloses a method and apparatus for arbitration and fairness on a bus (Title). Referring to Figs. 2-4, Teener shows Nodes 1-3 connected to root Node 4 through the same port. Teener shows, if each of Nodes 1-3 request access to the bus, that Node 3 would be selected prior to Nodes 2-3 because Node 3 is directly allocated to the connecting port of Node 4 (Col. 2-3; lines 10-33; claim 3,4,9,10,15,16 – at least two apparatuses are connected to the same connection terminal; claim 4,10,16 – both of at least two apparatuses designated by the identifier allocated to the connection terminal; claim 3,9,15 – one of the at least two apparatuses is designated by the identifier allocated to the connection terminal and selected prior to the any other of the at least two apparatuses, which is not designated by the identifier; claim 4,10,16 – one

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of the at least two apparatuses is directly connected to the connection terminal and is selected prior to the any other of the at least two apparatuses, which is indirectly connected to the connection terminal; claim 5,11,17 – apparatus A designated by a specific identifier is connected to a connection terminal to which the specific identifier is allocated; claim 5,11,17 – apparatus B designated by the specific identifier is connected to a connection terminal to which the specific identifier is not allocated or to a connection terminal to which an identifier different from the specific identifier is allocated; claim 5,11,17 – apparatus A is selected prior to apparatus B).

It would have been obvious to one of ordinary skill in the art at the time of the invention to adapt the apparatus, method and system of Kobayashi by expressly showing arbitration control when two nodes are connected to the same port and one node is designated by the port identifier or both nodes are designated by the port identifier but one is directly connected to the port, as shown by Teener. By establishing parent-child relationships between all of the nodes and controlling bus arbitration based on the port allocations and direct connections to the port, this modification provides both prioritized access and fairness among all nodes in the system.

Response to Arguments

6. Applicant's arguments filed 7/29/2004 have been fully considered but they are not persuasive.

- In the Remarks on pg. 6 of the Amendment, the Applicant contends that Kobayashi does not disclose predetermined identifiers are allocated to the connection terminals for a given physical connection.
- The Examiner respectfully disagrees. While the Examiner agrees with the Applicant in that Kobayashi discloses dynamic assignment of physical addresses to nodes, Kobayashi discloses that the hierarchical structure of the nodes is determined prior to the dynamic assignment of physical addresses. It is this determination of the hierarchical structure between nodes, where each node is identified in a parent-child relationship with the other nodes in the system, prior to the dynamic assignment of physical addresses that the Examiner is interpreting as predetermined identifiers.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within


TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory B Sefcheck whose telephone number is 571-272-3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GBS
12-7-2004


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